DESCRIPTIONS OF TWO NEW SUBSPECIES OF THE DOWNY WOODPECKER, DRYOBATES PUBESCENS (LINNAEUS).

By HARRY C. OBERHOLSER.

THE comparison of a series of *Dryobates publicens* from Alaska with a similar series of specimens from Florida reveals at once a striking difference between the representatives of this species from these widely separated localities; the birds from the northern half of the eastern United States being in every respect perfectly intermediate between these two extremes. The Florida birds present the minimum of size, combined with dullness of coloration; while those from Alaska are largest, the light-colored portions of the plumage being of greater extent and pure white.

It therefore becomes necessary either to entirely disregard the evident geographical variation here exhibited, or to recognize instead of one, three races of *Dryobates publication* in northern and eastern North America. It is, however, not without considerable hesitation, and only after the careful examination and comparison of a large number of specimens (altogether 200), that the writer has decided to attempt to characterize these subspecies.¹

While the differences assigned are perhaps not such as to positively determine by any single character every given individual, yet the average distinctions are readily appreciated upon comparison, and the diagnoses are based upon what may be considered fairly well differentiated averages.

For the form of Downy Woodpecker inhabiting the Gulf States there is already a name available, as follows:

DRYOBATES PUBESCENS MERIDIONALIS (Swainson).

SOUTHERN DOWNY WOODPECKER.

Picus pubescens, LINNLEUS, Syst. Nat., Ed. 12, 1766, I, 175 (part).

Pieus (Dendrocopus) meridionalis, SWAINSON, Fauna Bor. Amer., H, 1831, 308.

Picus le contei, JONES, Ann. Lyc. N. Y., IV, 1857, 489, pl. XVII (Georgia, threetoed specimen).

D[ryobates] pubescens, CABANIS, Mus. Hein., IV, June 15, 1863, 62 (part).

Subspecific characters.—Similar to Dryobates pubcseens, but smaller; the lower parts more brownish, the white markings of wings and tail averaging of less extent.

¹The writer takes this occasion to express to Mr. Robert Ridgway, of the National Museum, his indebtedness for many favors incident to the preparation of the present paper. To Dr. J. A. Allen and Mr. F. M. Chapman, of the American Museum of Natural History, and to Messrs. William Brewster and Gerrit S. Miller, jr., as well, obligations are acknowledged for courtesy in regard to the loan of specimens.

Description.—Adult male (No. 150139, U.S.N.M., Lake Arbuckle, Polk County, Florida, March 7, 1895; William Palmer). Upper parts black; nasal feathers yellowish white, slightly mixed with black; superciliary and dorsal stripes, together with stripe on the side of the head and spotting on wings, white. Middle tail-feathers black; next pair black, with very slight white edging on terminal portion of outer webs; remaining tail-feathers white, more or less varied with black. Under surface pale brownish; lower tail-coverts well marked with black. No white tips to the five outer primaries. A red nuchal band.

Length, 152.4 mm.; extent, 283.7 mm.; wing, 86.4 mm.; tail-feathers, 53.3 mm.; exposed culmen, 15.5 mm.; tarsus, 15.2 mm.; middle toe with claw, 15.2 mm.

Habitat.—South Atlantic and Gulf States, from South Carolina to Texas.

This form was first described from Georgia, by Swainson,¹ who mentioned its small size and the darker color of the lower parts in contrast to *D. pubescens;* but having only two specimens for examination he very cautiously expressed his doubt in regard to its validity.

The amount of white on the wings and tail of D. pubescens meridionalis is, in a majority of the specimens examined, somewhat less than in D. pubescens, the difference being most appreciable on the tips of the primaries and on the outer of the two middle pairs of tail-feathers. The darker appearance of the under parts in specimens from the Southern States is usually quite apparent, although the whitest individuals from Florida are almost indistinguishable in this respect from some specimens of D. pubescens. The birds of a small series from Gainesville, Florida, collected by Mr. F. M. Chapman, are darker than any of the others examined, and would appear to be somewhat adventitiously stained, as evidently are some specimens of D. pubescens from the coal regions of Pennsylvania and northern Ohio.

With regard to size, the birds from Florida are smallest, the average measurements of 42 adults from that State being as follows: Wing, 88.6 mm.; tail-feathers, 56.1 mm.; exposed culmen, 15.2 mm.; tarsus, 15.2 mm.; middle toe with claw, 15.2 mm. Specimens from the other Gulf States, together with those from South Carolina and Georgia, are slightly larger than Florida birds, but are not otherwise noticeably different.

The birds at hand from North Carolina, Tennessee, Indian Territory, southern Illinois and extreme southern Virginia, appear to be intermediate between *D. publicscens meridionalis* and *D. publicscens*; and these, although not above included, are perhaps without impropriety referable to *D. publicscens meridionalis*.

¹ Fauna Bor. Amer., II, 175.

DRYOBATES PUBESCENS NELSONI,¹ new subspecies.

NORTHERN DOWNY WOODPECKER.

Subspecific characters.—Similar to Dryobates publicenes, but averaging larger; the under parts pure white instead of brownish; the lower tail-coverts and outer tail-feathers averaging with much less of black markings; red nuchal band of male averaging somewhat wider.

Description.—Adult male (Type No. 75654 U.S.N.M., Nulato, Alaska, E. W. Nelson). Above black; nasal feathers yellowish white, slightly mixed with black. Superciliary stripe, streak on checks extending nearly around the neck behind, wide dorsal stripe, spots on the wing quills and their coverts, together with the comparatively broad tips to most of the primaries, white. Frontal feathers conspicuously varied with white markings. Middle pair of tail-feathers black; next pair tipped, and on apical half broadly edged externally with white; third pair much more extensively white; the two outer pairs white with exception of their extreme bases under the coverts and a few small spots of black on the terminal portions. Under parts pure white; the few dark markings on lower tail-coverts linear and indistinct. Nuchal band scarlet vermilion.

Measurements.—Wing, 99.1 mm.; tail-feathers, 69.1 mm.; exposed culmen, 16.5 mm.; tarsus, 15.5 mm.; middle toe with claw, 15.2 mm.

Female similar to male, but lacking the red nuchal band and the white markings of the forehead.

Habitat.-Alaska and northern British America.

In a series of fifteen specimens in the collection of the U.S. National Museum the characters given above are fairly constant. Three birds from Kadiak are smaller than all but one of the other Alaska specimens, and have more black on the outer tail-feathers. In this latter respect the Kadiak birds are, however, closely approached by two of the Alaska specimens, and by two others, from Fort Resolution and Moose Factory respectively. A specimen from Victoria County, New Brunswick (Amer. Mus., No. 61362), is also very similar to these, but is smaller.

Of the 15 specimens above mentioned, only one (No. 95275, U.S.N.M., from Kadiak) shows dark markings on the under tail-coverts equaling in amount those on average examples of *D. pubesceus*. While some individuals of *D. pubescens*, especially those from the northern United States, are fully as pure white below as are the specimens of *D. pubescens nelsoni*, yet the ordinary coloration of the former is much more brownish.

The white mottling of the forehead seen in the males of *D. pubescens* nelsoni, though not a diagnostic mark, is present to a greater or less degree in 6 of the 12 males of this form; while of the 100 specimens of

¹Named for Mr. E. W. Nelson, in recognition of his valuable contributions to Alaskan ornithology.

D. pubescens examined, there were found only four (males) which possessed any indication of such markings.

In *D. pubescens nelsoni* the red nuchal band of the male averages wider than in *D. pubescens*, 12 specimens of each form giving an average of 8.8 mm. for the former, and 7.5 mm. for the latter.

Comparative measurements (in millimeters) of the three forms here treated are given in the subjoined tables:

	Wing.	Tail feathers.	Exposed culmen.	Tarsus.	Middle toe with claw.
Minimum Maximum Average	84.3 94.7 89.1	$49.5 \\ 61 \\ 55.9$	$13.7 \\ 17.5 \\ 15.5$	$ \begin{array}{r} 14 \\ 16.8 \\ 15.5 \end{array} $	$ 13.5 \\ 16.8 \\ 15.2 $

Dryobates pubescens meridionalis (64 specimens).

Dryobates	pubescens (49 spec	imens)	۱.
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	Wing.	Tail feathers.	Exposed culmen.	Tarsus.	Middle toe with claw.
Minimum Maximum Average	. 90, 2 99, 1 94, 7	54.6 67.3 61.5	$13, 5 \\ 18, 3 \\ 15, 5$	13.51715.7	$ \begin{array}{r} 14 \\ 17.8 \\ 15.7 \end{array} $

Dryobates pubescens nelsoni (15 specimens).

·	Wing.	Tail feathers.	Exposed eulmen.	Tarsus.	Middle toe with claw.
Minimum Maximum A verage	92, 2 103, 6 98, 8	58.4 74.9 66.8	$15.2 \\ 17.3 \\ 16.3$	$\begin{array}{c}15\\17.3\\15.7\end{array}$	15 17.3 15.7